## BY ORDER OF THE COMMANDER 934TH AIRLIFT WING

934TH AIRLIFT WING INSTRUCTION 32-2001

21 APRIL 2014

Civil Engineering

BASE FIRE PROTECTION PROGRAM



## COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes procedures and responsibilities for the elimination/minimization of fire hazards that cause fires. These efforts minimize the loss of life, injury, and property damage should a fire occur. It implements AFPD 32-20, Fire Emergency Services, and AFI 32-2001, The Fire Protection Operations and Fire Prevention Program. This instruction aids and promotes fire safety for all personnel and it applies to all host and tenant organizations on Minneapolis-St. Paul Air Reserve Station. Post a copy of this instruction in a conspicuous location in each regularly occupied facility for review and use by occupants. Ensure that all records created as a result of process prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at https://www.my.af.mil/gcssaf61a/afrims/afrims/. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Form 847s to 934 CF/SCBA. This instruction requires collecting and maintaining information protected by the *Privacy Act of 1974* authorized by (Title 10, U.S.C., Section 8013). System of records notice (F033 AF B, Privacy Act Request File) applies.

### **SUMMARY OF CHANGES**

Changed paragraph 2.2.2 to reflect current AFIs in use. Changed Paragraph 2.4.2 to modify the responsibilities of The Assistant Fire Chief for Fire. Paragraph 9.13.1 modifies the use of

Hangars 821 and 870 for public assembly, i.e. Commander's calls and wing functions. Added **paragraph 9.1.2.5** to provide guidance on the use of extension cords. Added Section 10. to provide guidance on Aircraft Hangar usage for public assembly.

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**1. General Information:** A successful fire prevention program requires command support at all levels and the continued efforts of all base personnel. The effects of fire have a direct impact on the ability of the 934 Airlift Wing, Minneapolis-St. Paul Air Reserve Station's assigned organizations to accomplish their missions. The Metropolitan Airports Commission (MAC) Fire Department provides fire protection, emergency medical services, and crash rescue services.

## 2. Specific Responsibilities:

2.1. Functional Managers and Unit Commanders: Each functional manager and unit commander is responsible for administering the fire prevention program within their functional area and for initiating corrective actions for fire hazards and fire safety deficiencies. Lack of interest and neglect are major causes of fire. This publication, along with regular inspections by the Base Fire Protection Specialist and Facility Managers are

intended to make this Air Reserve Station more fire safe. Unit commanders and functional managers are responsible for:

- 2.1.1. Ensuring that supervisors know and enforce this instruction.
- 2.1.2. Initiating administrative or disciplinary action when there is misconduct or negligence resulting in fire damage to government property.
- 2.2. Facility Managers and/or Supervisors are responsible for ensuring that areas under their control are maintained in a fire safe condition and that all fire hazards are corrected as quickly as possible. All facility managers are appointed by and are directly responsible to their functional managers and/or unit commanders. Facility managers and/or supervisors will do the following:
  - 2.2.1. Accompany fire inspectors during all fire inspections.
  - 2.2.2. Comply with the fire prevention duties specified in AFI32-2001, *The Fire Protection Operations and Fire Prevention Program*, AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 934 AWI 32-1004, *Real Property Facility Manager*, and this instruction.
  - 2.2.3. Facility managers and/or supervisors shall develop a written fire reaction plan for each building/occupancy to follow in the event of a fire (Attachment 2). This plan must cover fire reporting procedures, personnel evacuation, and first aid fire fighting (the use of extinguishers). The plan must also include, when applicable, such items as activation of fire suppression/reporting systems, emergency removal of aircraft, protection of high value/high hazard and critical material, safeguarding classified information, and accidents involving fuel handling or hazardous materials.
    - 2.2.3.1. A copy of this plan must be submitted to the Assistant Chief for Fire Prevention (934 MSG/CEF) for his approval and coordination.
  - 2.2.4. Supervisors will ensure that all employees receive their annual fire prevention refresher training as outlined in Attachment 6, *Supervisor's Annual Fire Prevention Refresher Handout*.
- 2.3. The Civil Engineer Squadron(CES) Commander or the Base Civil Engineer (BCE) is the Fire Marshal. The Fire Marshal is responsible to the Installation Commander for oversight of FES programs and provides the Assistant Chief for Fire Prevention the resources available to execute the fire prevention mission.
- 2.4. The Assistant Chief for Fire Prevention reports directly to the BCE and is responsible for establishing, executing and maintaining the 934 AW fire protection program.
  - 2.4.1. The Assistant Chief for Fire Prevention shall function as the single point-of-contact for Metropolitan Airport Commission Fire Department (MAC Fire) for communications between 934 AW and MAC Fire.
    - 2.4.1.1. The Assistant Fire Chief shall maintain and update as required Facility Prefire Plan for any facility inspected by the fire prevention office. MAC Fire shall receive copies of these plans.
    - 2.4.1.2. The Assistant Chief for Fire Prevention shall maintain Air Force Technical Order Form 88, Aircraft Pre-fire Plans for all assigned and specified transit aircraft.

The Assistant Chief for Fire Prevention shall update these plans biannually. MAC Fire shall also receive copies of these plans

- 2.4.2. The Assistant Fire Chief for Fire Prevention shall respond, when present on the installation, to all major emergencies and exercises, functioning as a member of the unified command between MAC Fire, 934 MSG/SFS and the Fire Prevention Office
- 2.4.3. The Assistant Fire Chief for Fire Prevention holds the responsibility for fire code enforcement, which includes the authority delegated by the installation commander to the BCE and the Assistant Chief to affect actions necessary to correct fire hazards and deficiencies. The Assistant Chief is responsible to track the deficiencies mitigation actions until complete or waived.
  - 2.4.3.1. The Assistant Chief for Fire Prevention, at his/her discretion, shall develop a means of tracking the aforementioned mitigation actions until complete or waived
- 2.4.4. The Assistant Chief for Fire Prevention shall develop a public fire education program. He/she shall tailor the education for specific audiences and purposes, such as fire extinguisher training or public assembly employee training. Fire safety education objectives are to equip personnel with the information needed to prevent fires, protect them and intervene early when fire occurs.
- 2.4.5. Assistant Chief for Fire Prevention shall perform an emergency services preconstruction facility plan review to ensure all required features are present and local emergency response elements are incorporated (i.e., accessibility to facility, location of fire hydrants, etc.).
  - 2.4.5.1. The Assistant Chief will provide design review comments to the Engineering & Construction Chief (CEC) for incorporation in projects.
- **3. Inspection Procedures:** The fire prevention inspection is the quality control element of a unit's fire prevention program. During inspections, the fire prevention inspector will pay particular attention to the following areas:
  - 3.1. Occupant's knowledge of fire reporting, evacuation, and first aid fire fighting procedures
  - 3.2. Adequacy and condition of fire suppression systems, detection devices, and alarms
  - 3.3. Adequacy and condition of devices and facility features to segregate and separate special fire hazard occupancy areas (fire doors, walls, draft stops, etc.)
  - 3.4. Condition of heating, fuel handling, and similar potentially hazardous devices or equipment.
  - 3.5. Housekeeping practices
  - 3.6. Adequacy, condition, and accessibility of fire exits and escapes
  - 3.7. Adequacy, condition, and accessibility of portable fire extinguishers
  - 3.8. Proper storage of flammable and combustible materials
  - 3.9. Proper storage of hazardous materials
  - 3.10. Proper disposal of smoking materials

- **4. Inspection Process:** Facility managers, their alternates, or supervisors of the operation being inspected will accompany the fire inspector during all fire inspections.
  - 4.1. During inspections, if a hazard exists that presents an imminently dangerous situation, it will be brought to the attention of the supervisor in charge. He/She must then take prompt action to eliminate the hazard, reduce the hazard to an acceptable level of safety, or cease the operation and withdraw exposed personnel.
  - 4.2. Upon completion of each inspection, the fire inspector will brief the individual accompanying him/her of the condition in the area inspected. Any fire hazards or FSDs noted and the suggested corrective actions will be briefed at this time.
  - 4.3. When a fire hazard or FSD is found during an inspection and cannot be corrected on the spot, an AF Form 1487, *Fire Prevention Visit Report*, will be issued to the facility manager or the supervisor in charge.
    - 4.3.1. Copy one of the AF Form 1487 is forwarded to the functional manager by the facility manager for his/her review and coordination in Block 19.
      - 4.3.1.1. The functional manager must ensure prompt action is taken to eliminate or reduce the hazard to an acceptable level of safety.
      - 4.3.1.2. If the functional manager's copy of the AF Form 1487 is not returned to the Assistant Chief for Fire Prevention's Office on or before the suspense date, a copy of the report will be sent to the Installation Commander for further action.
    - 4.3.2. Copy two of the AF Form 1487 is issued to the facility manager or supervisor accompanying the fire inspector. The facility manager will:
      - 4.3.2.1. Ensure that corrective actions are carried out promptly.
      - 4.3.2.2. Brief the functional manager on all corrective actions taken and the status of any open fire hazard.
      - 4.3.2.3. This copy of the AF Form 1487 is to be maintained in the facility's fire prevention folder by the facility manager for a period of not less than one year or until all hazards identified on that report are corrected, whichever is longer.
    - 4.3.3. Copy three is maintained in the fire inspector's suspense file until the functional manager's copy is returned. At that time, copy three is discarded and the functional manager's copy is filed in the fire inspector's facility folder for a period of two years or until all hazards identified on that report have been corrected, whichever is longer.
- **5. Fire Reporting and Evacuation Procedures:** Any person discovering a fire or evidence of a fire must notify the Fire Department by calling the Base Defense Operations Center (BDOC) at x911. Immediate and accurate reporting of a fire is essential to minimize fire propagation and vehicle response time. All fires must be reported regardless of size, even if it has burned itself out, or extinguished by nonfire fighting personnel. When a fire occurs, the person discovering the fire must, in the following order:
  - 5.1. Notify facility occupants, both verbally and by activating the building's fire alarm system.
  - 5.2. Ensure evacuation is complete or being conducted.

- 5.3. Notify the fire department by calling the BDOC via one of the following methods: Dial **911** using on base telephone system or (612) 713-1911 from any phone serviced by the commercial phone system (i.e. pay phones and cellular phones).
- **6. Public Assembly and Recreational Facilities:** The potential for catastrophic loss of life and property in places of public assembly requires extraordinary efforts to prevent fire and minimize loss of life and damage.
  - 6.1. Assembly occupancies include, but are not limited to, all buildings or portions of buildings used for gathering together 50 or more people for such purposes as deliberation, worshiping, entertainment, eating, drinking, amusement, recreation, or awaiting transportation.
  - 6.2. Public Assembly Fire Prevention Program Elements:
    - 6.2.1. Each place of public assembly must maintain a facility/fire prevention folder. The folder will contain the following items:
      - 6.2.1.1. 934 AW Instruction 32-2001 and attachments
      - 6.2.1.2. 934 AW Instruction 32-1004, Real Property Facility Manager
      - 6.2.1.3. Fire reaction plan for that facility
      - 6.2.1.4. Training documentation on each employee
      - 6.2.1.5. Deep fat fryer calibration certification, where applicable
      - 6.2.1.6. Records of kitchen hoods and ducts cleaning, fire drill documentation, approvals, permits, and work requests
      - 6.2.1.7. AF Forms 1487, maintained for at least one year.
    - 6.2.2. Refresher training is the responsibility of supervisory personnel. All employees must receive annual refresher training in fire prevention, and the proper use of portable fire extinguishers and installed fire suppression systems. The supervisor will document the training on each individual's AF Form 55, *Employee Safety and Health Record*.
    - 6.2.3. Prior to opening or closing a facility, the manager or designated assistant must conduct an inspection of the facility, according to Attachment 3, *General Fire Prevention Checklist for Opening and Closing for Places of public Assembly*. Any fire hazards found will be corrected on the spot if possible, those that cannot, will be reported to CE trouble desk for correction, 713-1918.
    - 6.2.4. The Assistant Chief for Fire Prevention will establish occupant load and the facility manager must maintain the capacities in the fire prevention folder.
    - 6.2.5. Only noncombustible or fire retardant decorations will be permitted for special functions where temporary decorations are involved.
    - 6.2.6. Aisles and exits must be clear and unobstructed at all times.
      - 6.2.6.1. All exit doors must be unlocked when the building is occupied to allow safe exit in the event of a fire.

- 6.2.6.2. No exit enclosure or exit access shall be used for any purpose, which could interfere with its use as an exit, such as for storage, seating, lounging, or similar purposes.
  - 6.2.6.2.1. Every room constituting an assembly occupancy and not having fixed seats shall have the occupant load of the room posted in a conspicuous place near the main exit from the room. Approved signs shall be maintained and distributed by the 934 MSG/CEO. Signs shall indicate the number of occupants permitted for each room use.
  - 6.2.6.2.2. A posted floor evacuation diagram is required which reflects the actual floor arrangement and exit locations. The diagram shall be posted and oriented in a location and manner acceptable to the authority having jurisdiction.
    - 6.2.6.2.2.1. All diagrams shall be oriented with the top in the direction that the viewer is facing. There shall be a notation showing the location of the viewer. The means of egress from the viewers' location shall be shown.
    - 6.2.6.2.2.2. The diagram shall include all exit locations, exit access paths, stairways, elevators, elevator lobbies, areas of refuge, areas of rescue assistance, shelter areas, and exterior outside assembly areas.
- 6.2.6.3. The required semi-annual inspection of fire suppression systems or maintenance, servicing, recharging of fire protection systems is the responsibility of the Civil Engineer IAW the following NFPA codes/standards and UFC's
  - 6.2.6.3.1. NFPA 1: Uniformed fire code
  - 6.2.6.3.2. NFPA 10: Portable fire extinguisher
  - 6.2.6.3.3. NFPA 13: Installed sprinkler systems
  - 6.2.6.3.4. NFPA 17: Dry chemical extinguishing systems
  - 6.2.6.3.5. NFPA 25: Standard for Inspection testing and maintenance of water base fire protection systems
  - 6.2.6.3.6. NFPA 96: Standard for ventilation control and fire protection of commercial looking operations
  - 6.2.6.3.7. UFC 3-601-2 Operation and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems
- **7. Lodging Responsibilities:** Functional managers, facility managers, and supervisors are responsible to enforce the requirements of this entire instruction are met as they apply to lodging.
  - 7.1. Managers and supervisors are responsible to develop and implement a fire prevention program, which includes; orienting personnel on fire prevention, fire reporting, and evacuation procedures.
    - 7.1.1. All assigned personnel must be briefed on their fire prevention responsibilities upon assignment to lodging.
    - 7.1.2. All lodging facility occupants must have available for their viewing, the Fire Reaction Plan developed for that facility.

## 7.2. Inspections:

- 7.2.1. A lodging facility manager must accompany the fire inspector during all scheduled fire inspections.
- 7.2.2. The Functional Manager must appoint an individual to conduct a monthly selfinspection of the lodging facility using Attachment 4, *Lodging Fire Prevention Inspection Checklist*. Upon completion, this checklist shall be maintained in the facility folder for a period of one-year.

#### 7.3. Restrictions:

- 7.3.1. Any cooking appliance having an open or exposed heating element is prohibited in individual lodging rooms.
  - 7.3.1.1. Only small conventional microwave ovens supplied by the lodging facility are permitted in lodging rooms.
  - 7.3.1.2. Coffee makers are permissible as long as they are being used in accordance with the manufacturer's guidelines and are shut off when room is unoccupied. The use of coffee makers with automatic timers is prohibited.
- 7.3.2. Fire detection devices are placed in facilities to notify occupants of a life threatening presence of excessive smoke or heat. This device will never be covered, dismantled, removed, relocated, or tampered with in any way.
- **8.** Contractors Responsibilities: Contractors are responsible for the fire safe condition of their work areas and for compliance with fire instructions. The proper authority prior to beginning any project must brief them. Contractors must ensure that:
  - 8.1. Exits, manual pull stations, and fire extinguishers are not blocked or obstructed.
  - 8.2. All electrical equipment used is in good operating condition.
  - 8.3. Multiplug outlets are not to be used.
  - 8.4. Extension cords are of one continuous length without splice.
  - 8.5. Before attempting any welding or cutting operation, contact Fire Prevention (X1923) for a site inspection and issuance of AF Form 592, *USAF Welding*, *Cutting*, *and Brazing Permit*.
  - 8.6. All flammable liquids are stored in accordance with AFOSH 91-203 Chapter 22, and NFPA 30, *Flammable and Combustible Liquids*.
  - 8.7. All subordinates are properly briefed on fire reporting, facility evacuation procedures, the use of portable fire extinguishers, and fire alarm systems within their facility or area.
  - 8.8. Closing Inspection: At the close of each duty day, the contractor (or a responsible representative) must conduct a fire inspection to ensure the area under their control is left in a fire safe condition.
- **9. General Fire Prevention Responsibilities:** Every individual, both military and civilian, has the obligation to adhere to and enforce the requirements of this instruction as it applies to their specific function or facility.
  - 9.1. Requirements:

- 9.1.1. Electrical: When a situation or hazard is not specifically addressed in this section, the requirements of the "National Electric Codes" (NFPA 70) and the "Life Safety Code" (NFPA 101) shall apply.
  - 9.1.1.1. All switches, receptacles, outlets, and junction boxes must be covered with suitable cover plates.
  - 9.1.1.2. Cracked, broken, or otherwise damaged cover plates must be replaced.
  - 9.1.1.3. All privately owned air conditioners, refrigerators, radios, coffee pots, and other electrical appliances are subject to inspection by the Base Civil Engineering Division.
  - 9.1.1.4. Electrical panels, circuit breakers, and fuse boxes:
    - 9.1.1.4.1. Access to electrical panels, circuit breakers, and fuse boxes will not be blocked or obstructed at any time.
    - 9.1.1.4.2. All electrical service panels shall be marked to identify each circuit.
    - 9.1.1.4.3. Electrical service panels must be provided with a properly fitted door that is maintained in the closed position.
    - 9.1.1.4.4. A fuse or circuit breaker that continuously blows or trips must be reported to the Civil Engineering work call desk (713-1918).
    - 9.1.1.4.5. Circuit breaker switches in circuit breaker panels that are to be left on must not be taped over to the "on" position.
  - 9.1.1.5. Electrical wiring, plugs, and cords:
  - 9.1.1.6. All electrical wiring, plugs, and cords shall be in good operating condition. Any frayed, spliced, deteriorated, or otherwise damaged electrical wiring must be repaired/replaced immediately.
  - 9.1.1.7. All electrical wiring, plugs, outlets, switches, and similar devices will be installed or altered only by Civil Engineering electricians or a qualified contractor in accordance with the "National Electric Code."
- 9.1.2. Extension cords and multiplug extension/outlets:
  - 9.1.2.1. No circuit shall be loaded beyond its rated capacity, therefore, the use of multiplug extension/outlets is not allowed.
  - 9.1.2.2. Extension cords shall be no longer than necessary and must be of one continuous length without splice.
  - 9.1.2.3. Extension cords must not be attached to building surfaces, run through doorways, windows, or concealed under rugs.
  - 9.1.2.4. Only one appliance should be plugged into any single extension cord.
  - 9.1.2.5. Extension cord shall not take the place of permanently installed wiring and outlets.
- 9.2. Combustibles shall not be stored under stairs, in attics, or under floors in buildings.

- 9.2.1. Combustible material or stacked storage must not be stored any closer than 18 inches from electrical lights, heat sources, or any fire protection/detection device.
- 9.2.2. The use of mechanical rooms for any type of storage is prohibited.
- 9.3. The refueling and storage of gasoline-powered equipment must be in strict compliance with AFOSH Standard 91-501, paragraph 22.7.
- 9.4. All cooking processes must be supervised at all times. Unattended cooking is prohibited.
  - 9.4.1. Outdoor cooking devices shall not be utilized closer than 10 feet to any building. No cooking on flightline or ramp areas.
  - 9.4.2. These devices must not be utilized inside any structure, under carports, eaves, overhangs, pavilions, etc.
  - 9.4.3. Smoking is only allowed in designated areas selected and approved by ASTS and inspected by the Assistant Chief for Fire Prevention
  - 9.4.4. Discarded smoking materials will be put in proper fire safe receptacles in accordance with NFPA and AFOSH 91-501.
- 9.5. Welding, cutting and brazing shops. The Assistant Chief for Fire Prevention in coordination with both Base Safety and the Bioenvironmental Engineers shall authorize and certify those locations that perform the aforementioned operations. The fire prevention office shall maintain a centralized list of these locations within the AF Form 592 program
  - 9.5.1. AF Form 592: The Assistant Chief for Fire Prevention or authorized individuals issue an AF Form 592 prior to any individual(s) beginning any welding, cutting, brazing, or open flame operations not performed in an authorized welding shop.
- 9.6. Heating and Heating Appliances
  - 9.6.1. At least 18 inches must be maintained between any heat producing appliance and combustibles.
  - 9.6.2. The use of portable/space heaters must be in accordance with the manufacturer specifications.
  - 9.6.3. The use of any portable heating appliance containing a flammable or combustible liquid or gas is prohibited.
  - 9.6.4. All space heaters must be equipped with an automatic tilt switch that shuts down the appliance in the event it turns over.
  - 9.6.5. These devices must not be left unattended when in use and must be turned off at the end of the day/shift.
  - 9.6.6. Space heaters shall be plugged directly into wall outlets. Do not plug heaters in a power strip or extension cords.
  - 9.6.7. Private space heaters are not authorized and the Assistant Chief for Fire Prevention must approve all government purchased/provided heaters prior to installation/use

- 9.6.8. Cup warmers, Candle warmers, or other non-specific heat producing devices or lighting solely for aesthetic purposes are prohibited. The Assistant Chief for Fire Prevention will authorize on a case by case basis any devices not specified by this section.
- 9.7. Fire Protection/Prevention Systems and Devices:
  - 9.7.1. Inspection, testing, maintenance, repair, and/or alteration of any fire protection, suppression, or alarm system will be performed only by approved Civil Engineering craftsmen, qualified electrician, or fire protection personnel.
    - 9.7.1.1. When any Fire Alarm System, Sprinkler System, Water System, or individual/group of Hydrant(s) experiences an outage or returns to service, the CE Craftsman responsible shall contact the Security Forces desk and request they contact MAC Fire via the direct line when any of the aforementioned circumstances occur.
    - 9.7.1.2. The BDOC shall contact the Assistant Fire Chief for Fire Prevention, during duty hours or the next business day he/she is on duty.
  - 9.7.2. When any fire alarm system is activated accidentally or malfunctions, Security Forces (X1102), will be notified immediately.
  - 9.7.3. A minimum of an 18-inch clearance must be maintained around any part of a fire protection/detection device.
  - 9.7.4. Fire doors shall remain in the closed position at all times, unless held open by an approved releasing device.
  - 9.7.5. Vehicles are not allowed to park within 5-feet of any fire hydrant.
  - 9.7.6. All maintenance or water curtailments on the base water system that may affect fire protection operations must be coordinated with the Assistant Chief for Fire Prevention prior to start.
  - 9.7.7. Life safety will not be compromised; therefore, all exits shall be unlocked to allow a safe evacuation whenever the building is occupied.
  - 9.7.8. No part of an exit or exit enclosure shall be used for any purpose, such as storage, seating, lounging, etc, which could interfere with its use as a means of egress.
  - 9.7.9. Exit signs and emergency lighting: Outofservice illuminated exit lights and emergency lighting systems must be reported immediately to Civil Engineering Trouble Desk (713-1918).
- 9.8. Fire extinguishers and extinguisher training.
  - 9.8.1. The using organization will be responsible for the inspection, maintenance, and recharging of fire extinguishers. Extinguishers shall be inspected at least monthly, in accordance with NFPA 10, Standards for fire extinguishers.
  - 9.8.2. Extinguishers shall be clearly visible. In locations where visible obstruction is unavoidable, directional arrows will be provided to indicate the location of extinguishers.
  - 9.8.3. Immediately document any extinguisher defect and notify the Base Civil Engineers Trouble Desk (713-1918) of extinguisher model, location, and discrepancy.

9.8.4. All assigned personnel shall be thoroughly familiar with the location and proper use of portable fire extinguishers within their work area.

# 9.9. Flammable liquids

- 9.9.1. Where occupancies require the storage of small quantities of flammable liquids, they must be stored in a metal locker plainly labeled "FLAMMABLES----KEEP FIRE AWAY".
  - 9.9.1.1. All newly purchased flammable storage cabinets shall be configured with self-closing devices. If an existing cabinet has a self-closing device, it shall be maintained in effective working order
- 9.9.2. Flammable liquids will not be used as a cleaning agent unless specifically intended for such use.
- 9.9.3. No more than a one-day supply of paints, thinners, or other flammable materials shall be kept at the job site. All unused flammable material will be returned to the storage area when no longer needed.
- 9.10. Aircraft Maintenance and Flightline: All refueling and defueling of aircraft will be according to applicable T.O.'s and checklists, i.e., 0025172.
  - 9.10.1. The expansion of fuel must be considered if aircraft are refueled prior to parking in a heated Hangar.
  - 9.10.2. Operation of internal combustion powered equipment, whether gasoline or diesel, in Hangars will be kept to a minimum, i.e., a tug to pull an aircraft in or out, the deicing truck, the hydraulic pumping unit and/or vehicle maintenance emergency wrecker service, are acceptable.
  - 9.10.3. Hangars 821 and 870 are approved for working on fueled aircraft according to applicable T.O.s and checklists.
- 9.11. Every facility and function on this Air Reserve Station will conduct a frequent fire inspection to ensure the facility is maintaining a fire safe environment and a sound fire prevention program. Use **Attachment 5**, *General Purpose Fire Preventive Inspection Checklist*.

#### 9.12. Permit Process

- 9.12.1. The 934<sup>th</sup> Airlift Wing Mission Support Group, Fire Prevention Office uses the criteria from the National Fire Protection Organization (NFPA) Standard 1, the Uniform Fire Code Section 1.12 as its basis for the permit process.
- 9.12.2. The application shall initially start via an email to the Assistant Fire Chief for Fire Prevention. Once the Assistant Chief determines the viability, and tentatively approves the request, the requester shall coordinate the request through the offices indicated in the return email using the AF Form 1768, Staff Summary Sheet.
- 9.12.3. The default minimum required coordination are the Fire Prevention, Safety and Bio-Environmental Engineer offices, but each permit is a standalone document for a specific facility or event.

## 9.13. Public Fire Education

- 9.13.1. Fire safety education is an essential part of workplace safety training, and is promoted during fire inspections and other personal contacts. It may be tailored for specific audiences and purposes, such as fire extinguisher training or public assembly employee training. Fire safety education objectives are to equip personnel with the information needed to prevent fires, protect themselves and intervene early when fire occurs.
- 9.13.2. Fire Prevention Week (normally the first week of October) is a nationally established period to provide fire safety education to employees, their families and the public. The fire prevention office shall develop an event to publicize the annual fire safety message.
- 10. Aircraft Hangar Usage for Public Assembly Purposes: The occupancy classification for an aircraft hangar is industrial. The National Fire Prevention Association (NFPA) Standard 101, the Life Safety Code, Section 3.3.178.8, defines an Industrial Occupancy as "an occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted". This description fits the normal usage for the 934 MXG Hangar's B821 and B870. The NFPA further delineates an industrial occupancy as General Industrial Occupancy, High Hazard Industrial Occupancy, or Special Purpose Industrial. The aircraft hangars used by the 934th Airlift Wing are Special Purpose Industrial occupancies with high hazard contents. When an industrial occupancy operates as assembly occupancy, it does so as festival seating. NFPA 101, Section 3.3.221.1, defines festival seating as a form of audience/spectator accommodation in which there is no seating, other than a floor or finished ground level, for the audience/spectators gathered to observe a performance.
  - 10.1. Conditions for Hangar Usage as Public Assembly
    - 10.1.1. NFPA 13.2.5.4.1 defines the conditions under which the Authority Having Jurisdiction (AHJ), the BCE can approve festival seating. Specifically, "in assembly occupancies where occupant loads exceed 250; if there is an approved life safety evaluation". This section of 934AWI32-2001 outlines the conditions under which 934 MXG may use the hangar under their control as public assembly occupancies
    - 10.1.2. The 934 MSG/CEF will provide fire safety training for the MXG as requested.
    - 10.1.3. MAC Fire's response plans for fires in the hangars contain automatic calls for mutual aid to the surrounding communities; MXG will need to inform the BDOC of any event where there are a large number of people in the Hangar.
    - 10.1.4. The 934 AW/MXG must develop and designate a group of individuals whose responsibility is operation of doors, event configuration, and occupant egress facilitation.
  - 10.2. High Expansion Foam (HEX) System
    - 10.2.1. Prior to the use of either B821 or B870 as public assembly occupancies, the high expansion foam firefighting systems in the facilities must have their foam inductor's disabled. 934MSG/CEO utilities section has the overall responsibility for operational maintenance of the HEX systems. This includes removing them from and restoring them to service. No outside agency is allowed access to the HEX systems without prior, expressed written permission from the BCE.

10.2.1.1. MXG must provide the 934 MSG/CEO a schedule of when they need the foam valves isolated which will disable the foam inductor, which in turn eliminates the foam engulfment hazard. The schedule will also indicate a time when 934 MSG/CEO can restore the system to full service; this facilitates the scheduling of technicians for the operations

## 10.3. Occupant Load

10.3.1. The festival seating maximum occupant load in either B821 or B870 is 1300-people.

## 10.4. Configuration Requirement

- 10.4.1. The following is the B821 configuration requirement with an aircraft in hangar. The MXG will set the stage in the middle of the hangar with the egress paths directly behind the formation (the aircraft location will determine the direction of egress). B870 cannot have an aircraft in the hangar during an assembly.
- 10.4.2. There must be a clearly defined event area and exit corridors.
- 10.4.3. The minimum event area for the maximum occupant load is 9100 sqft (91' x 100'). In B821, the stage must face north or south depending upon the presence of an aircraft in one of the hangar parking spots.
- 10.4.4. One egress corridor on each side (Southeast and Southwest) of the event area leading to the existing corridors

# 10.5. Facilitation of Occupant Egress

10.5.1. At all B821 or B870 events, the MXG will provide one person for each of the closed powered rolling hangar doors bordering the formation (a total of two-personnel). These individuals shall function as safety monitors and in the event of fire alarm activation, they shall initiate the opening of the doors, facilitating the egress of all personnel.

## 10.6. Equipment Safety

10.6.1. MXG must segregate and safety all equipment (powered or otherwise) from the occupants.

## 10.7. Occupant Fire Safety Briefing

10.7.1. At the start of an event, a representative shall make an announcement that details the steps the occupants should take in the event of an emergency, the areas considered off-limits, the egress corridors, and the assembly point for accountability.

TODD J. MCCUBBINN, Colonel, USAFR Commander

#### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

## References

DODI 6055.06, DOD Fire and Emergency Services Program, 21 Dec 2006

Unified Facilities Criteria (UFC) 3-600-01, Fire Protection Engineering for Facilities, Change 3, 1 March 2013

Unified Facilities Criteria (UFC) 3-601-02, *Operation and Maintenance: Inspection, testing, and Maintenance of Fire Protection Systems*, 8 September 2010

AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations, 24 Jan 2007

AFPD 32-20, Fire Emergency Services, 05 Aug 2003

AFI 32-2001, Fire Emergency Services Program, 27 February 2014

AFI 91-203, Air Force Consolidated Occupational Safety Instruction 15 June 2012

934 AWI 32-1004, Real Property Facility Manager, 12 May 1998

NFPA 1: Uniformed fire code, 2012 Edition

NFPA 10: Portable fire extinguisher, 2013 Edition

NFPA 13: Installed sprinkler systems, 2013 Edition

NFPA 17: Dry chemical extinguishing systems, 2013 Edition

NFPA 25: Standard for Inspection testing and maintenance of water base fire protection systems, 2014 Edition

NFPA 30: Flammable and Combustible Liquids, 2012 Edition

NFPA 96: Standard for ventilation control and fire protection of commercial looking operations, 2014 Edition

NFPA 101: The Life Safety Code, 2012 Edition

## Adopted Forms

AF Form 55, Employee Safety and Health Record

AF Form 593, USAF Welding, Cutting, and Brazing Permit

AF Form 847, Recommendation for Change of Publication

AF Form 1028, Facility Pre-Fire Plan

AF Form 1487, Fire Prevention Visit Report

## Abbreviations and Acronyms

**AF**—Air Force

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive

**AFSC**—Air Force Specialty Code

AHJ—Authority Having Jurisdiction

**AW**—Airlift Wing

**BCE**—Base Civil Engineer (Fire Marshal)

CE—Civil Engineer

**CES**—Civil Engineer Squadron

**DOD**—Department of Defense

**DODI**—Department of Defense Instruction

FOIA—Freedom of Information Act

**IAW**—In Accordance With

MAC FIRE—Metropolitan Airports Commission Fire Department

**NFPA**—National Fire Protection Association

**OI**—Operating Instruction

**OPR**—Office of Primary Responsibility

**ORM**—Operational Risk Management

**OSHA**—Occupational Safety and Health Administration

**PA**—Privacy Act

**POC**—Point of Contact

**RDS**—Records Disposition Schedule

#### **Terms**

**Functional Manager**—The senior operating officials at all levels, exercising managerial control of an activity or operation. These individuals are usually those officials who can acquire and commit resources for the correction of fire hazards and deficiencies.

**Facility Managers**—Appointed by the functional manager to ensure a sound fire prevention program is being enforced in each facility under their jurisdiction.

**Fire Hazard**—Any condition or situation which, if not corrected, could result in fire, injury, loss of life, or property.

**Fire Safety Deficiency (FSD)**—Any structural or design deficiency, which constitutes an unacceptable level of fire safety within a facility.

**Fire Protection Devices**—A device which aids in the suppression, detection, reporting, or aids in the limiting of the spread of fire. These features include, but are not limited to: sprinklers, detection devices, chemical extinguishing systems, fire extinguishers, fire doors, emergency lights, and exit lights.

**National Fire Protection Association (NFPA)**—A national organization, recognized as the authority for all matters involving fire emergencies that publishes national consensus standards and the National Fire Codes.

#### SAMPLE FIRE REACTION PLAN

- **A2.1. OCCUPANCY** (i.e. AGE Shop; HQ; Life Support; etc)
- **A2.2. OFFICE SYMBOL** (*yours*)
- **A2.3. BUILDING NUMBER** (yours)
- **A2.4.** The purpose of this plan is to establish procedures for fire prevention within (*insert YOUR facility and occupancy here, for example; building 744, BCE*).
- **A2.5. SCOPE:** Applicable to all assigned personnel.
- **A2.6. GENERAL:** These instructions provide the minimum fire prevention policies for the (again insert your facility and occupancy).
- **A2.7. PROCEDURES**: Responsible personnel upon closing of the facility will make comprehensive inspections. This inspection will include, but is not limited to the following:
  - A2.7.1. Conduct a walk through of the facility being ever alert to signs of smoke or heat.
  - A2.7.2. Ensure that all waste and trash has been placed in proper containers and/or emptied outside the building into a dumpster. Typically a contracted service, however special attention is encouraged: "TRASH IS THE LEADING SOURCE OF OFFICE FIRES"
  - A2.7.3. Ensure the safe condition of all heating/cooking appliances, including thermostatically controlled equipment, and that those devices not requiring continuous use are unplugged.
  - A2.7.4. Ensure that <u>combustible materials</u> of any kind <u>are not</u> placed in butt cans, and that these butt cans located outside the building are saturated with water so that contents are completely extinguished prior to dumping into outside trash dumpsters.

## **A2.8. Special Instructions:**

- A2.8.1. Initially all personnel will be briefed by the Assistant Chief for Fire Prevention on their fire prevention responsibilities and a refresher briefing will be conducted annually by their supervisor.
- A2.8.2. Trash receptacles must be noncombustible.
- A2.8.3. There must be an adequate number of butt cans w/self closing lids available outside the building to provide a means of discarding smoking materials. (Butt cans NSN: 7240-00-282-8411)
- A2.8.4. This Fire Reaction Plan must be conspicuously posted for employees to review.
- A2.8.5. Burned out exit sign lights are to be reported immediately to BCE trouble desk, X1918.
- A2.8.6. Exit doors shall be operable at all times. Doors will not be blocked or locked during occupancy, preventing passage. Adequate aisle space will be maintained for all exits.
- A2.8.7. Fire extinguishers will be checked monthly to ensure that they are not tampered with, are in their proper location, and have adequate pressure.

- A2.8.8. All personnel will be made aware of the location and use of all fire extinguishers, fire alarms, and exits.
- A2.8.9. Janitorial supplies will be properly stored and good housekeeping practices observed at all times: "TRASH IS THE LEADING SOURCE OF OFFICE FIRES"
- A2.8.10. Flammables will be stored in separate marked containers and only in authorized areas/cabinets, marked, "Flammable Keep Fire Away".
- **A2.9. REPORTING A FIRE:** When fire breaks out, the person discovering the fire must:
  - A2.9.1. Notify facility occupants both verbally and by activating the alarm system via pull station available near any exit.
  - A2.9.2. Ensure building is in the process of being evacuated.
  - A2.9.3. Notify Base Security by dialing **911.** 
    - A2.9.3.1. Give the Desk Sergeant the following information:
      - A2.9.3.1.1. Name
      - A2.9.3.1.2. Telephone number
      - A2.9.3.1.3. Location and type of fire
    - A2.9.3.2. Do not hang up until the Desk Sergeant releases you.
  - A2.9.4. Appoint an individual outside to direct fire fighters to the scene.
  - A2.9.5. Attempt to extinguish or control the fire using the proper fire extinguisher. Do not put yourself or others at risk if safety does not allow you to control the fire, evacuate the building.
  - A2.9.6. Make sure everyone is out of the building and has reported to the predestinated meeting place. (*Specify that meeting place for your facility*).
  - A2.9.7. Ensure that no one reenters the building until fire department personnel have deemed the building safe. **NOTE:** Ensure "Emergency Phone Number" stickers are affixed to every normal telephone within the facility.

	DATE
FACILITY MANAGER	
	DATE
ASSISTANT CHIEF FOR FIRE PREVENTION	

# GENERAL FIRE PREVENTION CHECKLIST FOR OPENING AND CLOSING OF PLACES OF PUBLIC ASSEMBLY

- **A3.1.** Are exit doors working properly?
- **A3.2.** Are exit doors and routes of exit clear and unobstructed?
- **A3.3.** Are all exiting doors unlocked when facility is occupied?
- **A3.4.** Are all decorations flame retardant?
- **A3.5.** Are all waste containers made of noncombustible material?
- **A3.6.** Are waste containers emptied at least daily or more frequently if needed?
- **A3.7.** Are suitable, sufficient ashtrays available?
- **A3.8.** Before closing, are all chairs, sofas and waste containers checked for dropped cigarette butts and all waste, rubbish, and smoking material residue removed from the building?
- **A3.9.** Vent motors turned off, (closing).
- **A3.10.** Are all flammable liquids stored properly?
- **A3.11.** Are cooking ranges and warming ovens turned off, (closing).
- **A3.12.** Are grease filters, hoods, ducts, and exposed surfaces in kitchen areas free of excessive grease deposits?
- **A3.13.** Are all unnecessary electrical appliances unplugged when not in use?
- **A3.14.** Ensure soiled linen is not piled near a source of heat, such as lights, steam pipes, radiators.
- **A3.15.** Are all electrical appliances and heating equipment in good condition?
- **A3.16.** Are all fire extinguishers in their proper location, unobstructed, and adequately charged?
- **A3.17.** Is the facility's fire alarm system readily accessible and unobstructed?
- **A3.18.** Are all telephones provided with the appropriate "Emergency Phone Number" sticker?
- **A3.19.** All required illuminated exit signs are lit and emergency lighting units are functioning properly.

#### LODGING FIRE PREVENTION INSPECTION CHECKLIST

- **A4.1.** Are occupants smoking in bed? Indications could be an ashtray in close proximity to the bed; cigarette butts on, near, or under the bed; and burn marks on the bed or bedding.
- **A4.2.** Are occupants mixing trash with smoking material?
- **A4.3.** Is there any evidence of occupants playing with fire?
- **A4.4.** Are combustibles too close to light bulbs or other heat sources?
- **A4.5.** Are all flammables properly stored?
- **A4.6.** Is there an excessive accumulation of combustibles?
- **A4.7.** Are all flexible cords (appliance or extension cords) in good repair? No frays, splices, or running under rugs through windows or doorways?
- **A4.8.** Are any outlets being overloaded (multiplug outlets)?
- **A4.9.** Are all waste and trash containers noncombustible and emptied at least daily?
- **A4.10.** Is there any unauthorized burning of candles or incense?
- **A4.11.** Are occupants cooking in dormitory rooms? Indications are grease accumulations on the walls or furniture, odor, food supplies in the refrigerator, etc.
- **A4.12.** Are exits unobstructed?
- **A4.13.** Are all fire extinguishers readily accessible and properly charged?
- **A4.14.** Are fire extinguishers, manual pull stations, control panels, and electrical circuit breaker panels unobstructed?

#### GENERAL PURPOSE FIRE PREVENTION INSPECTION CHECKLIST

#### A5.1. STORAGE:

- A5.1.1. Are all janitor closets and storage rooms maintained in a neat and orderly fashion?
- A5.1.2. Is storage disallowed in attics, crawlspaces, and under combustible stairwells?
- A5.1.3. Are mops that are used for dusting, waxing, or polishing hung at least six inches above the floor?
- A5.1.4. Are cleaning rags stored in metal containers with metal lids?

## **A5.2. FLAMMABLE STORAGE:**

- A5.2.1. Are all flammable storage areas clean and orderly?
- A5.2.2. Is storage disallowed in attics, crawlspaces, and under stairwells?
- A5.2.3. Are only approved containers being used for handling and storage of flammable liquids?
- A5.2.4. Are flammable materials being stored in a labeled metal storage locker used solely for that purpose?
- A5.2.5. Are flammable storage areas approved in writing by the Assistant Chief for Fire Prevention?

## **A5.3. WASTE CONTAINERS:**

- A5.3.1. Are only noncombustible waste containers (no wire mesh) being used?
- A5.3.2. Are all waste containers emptied at least daily or more often if needed?

#### A5.4. EXITS

- A5.4.1. Are all exit doors working properly?
- A5.4.2. Are all exit doors and routes of exit unobstructed?
- A5.4.3. Are all exits unlocked when facility is opened?

### **A5.5. ELECTRICAL:**

- A5.5.1. Is all wiring free from any defect, fraying, splicing, or any other type of damage?
- A5.5.2. Is wiring installed in a proper manner; not nailed or affixed to the walls, ceilings, or floors.
- A5.5.3. Are cover plates on all electrical outlets, switches, and junction boxes?
- A5.5.4. Are only proper size fuses installed?
- A5.5.5. Are fuse and switch boxes kept closed and unobstructed?
- A5.5.6. Is all unnecessary electrical equipment unplugged when not in use?

## SUPERVISOR'S ANNUAL FIRE PREVENTION REFRESHER HANDOUT

- **A6.1.** The object of this briefing is to outline individual duties and responsibilities in the prevention of injury or loss of life or property due to fires while working on this Air Force Station.
- **A6.2.** The prevention of fires is everyone's duty. All personnel must read the 934 AWI 32-2001, *Base Fire Protection Program.* Your supervisor can get a copy for your review. Fire instructions state that "individuals may be held liable for any violation of fire prevention rules or practices", so it behooves us to read and understand them.
- **A6.3.** Every employee should know what to do when they discover a fire, how to report it, how to evacuate a building, and use an extinguisher to fight the fire. The best way to fight a fire is to stop it before it starts; "Fire Prevention." If everyone recognized fire hazards and reported or corrected them at once, most fires would be stopped before they started. "Fire Hazard" what is it? It is a condition or situation, which if not corrected could lead to a fire causing injury or loss of life and property. Some examples are trash, oil, or paintsmeared rags not placed in proper containers, leaking or open flammable liquid containers, frayed or cracked electric wiring, multiple electrical connections causing overloaded circuits, smoking in a no smoking area, and cigarette butts put in trash cans. If everyone knew and took action upon finding a fire hazard, fires would be reduced to a minimum. All it takes is a call to Base Civil Engineering, ext. 1918, or telling your supervisor or facility manager.
- **A6.4.** What should you do if you find a fire on base or in your work area? Most important is to sound the alarm to warn others and call the fire department. Shout "FIRE" and trip the fire evacuation alarm pull station in the building, call the fire department by dialing Security Police, ext. 911. When reporting a fire by telephone, give name, organization, location of fire, and building number, also type of fire, like building, auto, aircraft, or flammable liquid. By all means let others in the building know where there is a fire; saving of life is most important; buildings and property can be replaced. Find out where the fire alarm pull stations are located. Be sure you know where all exits and emergency exits are located; this is a must for your own safety. Know the location of the fire extinguishers in your area and how to operate and use them. If there is any doubt about their operation or use, ask your supervisor who will either explain or arrange for fire prevention section to do so. In case of a fire, no matter how small or what type, sound alarm and call fire department before trying to put it out. The heat buildup and spread of fire is fast; a few seconds can be the difference in containing a fire in one room or total burning of a building. If we are fire minded and do our bit, we can make this the most fire safe base in the Air Force.
- **A6.5.** Fire Extinguisher Training: Every employee shall either complete an initial or refresher fire extinguisher class. All new employees will contact with Assistant Chief for Fire Prevention to schedule a hands on fire extinguisher training class. Annual refresher classes can be accomplished by section supervisors. The supervisor or designated individual can sign out the Fire Extinguisher Training video or complete the Fire Extinguisher power point presentation of the base homepage. Upon completion a signed roster will be forwarded to the Assistant Chief for Fire Prevention.